

AMENDMENTS TO THE CLAIMS

Pursuant to 37 C.F.R. § 1.121 the following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A switching circuit for use at the antenna of a multiband mobile cellular handset, the circuit comprising:
 - an antenna port,
 - a transmit (TX) low band port,
 - a TX high band port,
 - at least one receiver (RX) port,
 - the circuit further comprising a single pole, triple throw (SP3T) solid state voltage-controlled switch which includes a plurality of single pole, single throw (SP1T) solid state switching devices to selectively connect any one of the TX low band port, TX high band port and RX port to the antenna port
 - the antenna port is connected to the TX low band port via a first SP1T device, to the TX high band port via a second SP1T device, and to the RX port via first and second frequency-dependent phase shifting elements connected in series,
 - the switching circuit further including a first tuned circuit connected to the junction of the first and second frequency-dependent phase shifting elements via a third SP1T device and a second tuned circuit connected to an end of the second frequency-dependent phase shifting element via a fourth SP1T device, the first tuned circuit being tuned to resonate substantially at a center of a TX high band frequency range, the second tuned circuit being tuned to resonate substantially at a center of a TX low band frequency range, the first frequency-dependent phase shifting element corresponding to a

quarter wavelength at frequencies in the TX high band frequency range, and the first and second frequency-dependent impedances in combination corresponding to a quarter wavelength at frequencies in the TX low band frequency range,

wherein the first SP1T device includes an anode connected to the antenna port and a cathode connected to the TX low band port,

wherein the second SP1T device includes an anode connected to the antenna port and a cathode connected to the TX high band port,

wherein the third SP1T device includes an anode connected to the junction of the first and second frequency-dependent impedances and a cathode connected to the first tuned circuit, and

wherein the fourth SP1T device includes an anode connected to the end of the second frequency-dependent impedance and a cathode connected to the second tuned circuit,

the tuning circuit further including a first voltage input terminal connected to the anode of the first SP1T device and the cathode of the third SP1T device and a second voltage input terminal connected to the anode of the second SP1T device and the cathode of the fourth SP1T device.

2. Canceled
3. (Currently Amended) A switching circuit as claimed in claim [[2]] 1, wherein the SP1T switching devices are diodes.
4. Canceled
5. (Currently Amended) A switching circuit as claimed in claim [[4]] 1, wherein the first and second frequency-dependent phase shifting elements are first and second transmission lines respectively.

6. (Currently Amended) A switching circuit as claimed in claim [[4]] 1, wherein the first and second frequency-dependent impedances are first and second LC networks.
7. Canceled
8. (Previously Presented) A switching circuit as claimed in claim 1, wherein the at least one RX port comprises a plurality of different band RX ports derived from a common node of the circuit.
9. (Original) A switching circuit as claimed in claim 8, wherein the different band RX ports are each derived via a respective RF bandpass filter from the common node of the circuit.
10. (Currently Amended) A circuit for directing an RF input signal, appearing at a common node of said circuit and which may occupy any one of at least three mutually exclusive frequency bands, to a respective circuit output, the circuit including comprising:
at least three RF bandpass filters, each having a pass band corresponding to a respective one of the mutually exclusive frequency bands of the RF input signal, and
an impedance matching circuit connecting said RF filters in parallel to said common node, the impedance matching circuit configured and which is designed so that, within the pass band of any given RF filter, the impedance from said common node along the circuit paths through the other RF filters is high compared to the impedance along the circuit path through the given RF filter,
the impedance matching circuit including a first sub-circuit
connected to said common node and having a low-band output and a
high-band output, and
a second sub-circuit connected to the high-band output of the first

sub-circuit and having first and second outputs for upper and lower bands of the high-band output.

11. (Original) A circuit as claimed in claim 10, wherein the RF filters are SAW filters.
12. (Previously Presented) A circuit as claimed in claim 10, wherein the RF filters have a balanced output.
13. Canceled
14. (Currently Amended) A circuit as claimed in claim [[13]] 10, wherein the low band output of the first sub-circuit comprises a parallel tuned circuit and the high band output of the first sub-circuit comprises a series tuned circuit.
15. (Currently Amended) A circuit as claimed in claim [[13]] 10, wherein one output of the second sub-circuit comprises a transmission line and the other output of the second sub-circuit comprises a tuned circuit.